Onslow County Health Department
612 College Street
Jacksonville, North Carolina 28540
Phone: (910) 938-5851 Fax: (910) 989-2341

OPERATIONS PERMIT

(GS 130A-337)

Permit No: **EOP2013-01726**

Category: Operations Permit **Repair**

Owner: JACKSON BARBARA R

Address 181 COW HORN RD RICHLANDS, NC 28574

Parcel: 54-22 **SR #:**

Subdivision:

Lot: **Section:** **Phase:**

Block: **Part:** **System:**

Unit: **Division:** **Tract:**

Location:

FINAL PLOT / REMARKS

System Type: III

System Classification: g. Other non-conventional trench system

Manufacturer: Infiltrator Quick 4 Plus Low Profile

Model #: **IQ4PLP**

System Info: Installed 7-56s LOW PROFILE CHAMBER LINES in 83'x83' in 24" fill. Fill mound must be installed and approved prior to beginning installation of the drain lines. Contact the Onslow County Health Department for an inspection.

Note: Type V and VI systems expire in 5 years. (In accordance with Table Va of .1961). Owner must contact the Onslow County Health Department 6 months prior to expiration for permit renewal. Onslow County Health Department is required to inspect the following system types: IIIb, every 5 years; IV, every 3 years; V, once per year and VI, every six months.

Facility/Daily design flow: **3 bedrooms/360 GPD**

Water Supply: Public

Installed By: JERRY HEATH

Business Name: JERRY HEATH CO

Signed By: Sam Frazelle / Sam Frazelle Date: 09/09/2013

This system has been installed in compliance with applicable NC General Statutes, Rules for Sewage Treatment and Disposal, and all conditions of the I.P. and C.A. This system shall perform in accordance with I5A NCAC 18A Rule .1961. Ground absorption sewage treatment and disposal systems shall be checked, and the contents of the septic tank periodically removed from all compartments. The contents shall be pumped, by approved means, whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.

THE ISSUANCE OF THIS O.P. DOES NOT CONSTITUTE AN ONSLOW COUNTY WARRANTY OR GUARANTEE OF THE FUNCTIONALITY OF THE WASTEWATER SYSTEM.

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Jacksonville, North Carolina 28540
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CONSTRUCTION AUTHORIZATION

Permit No: **ECA2013-00448**

(GS 130A-336)

Category: Repair

(Required for Building Permit)

THIS AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION SHALL BE VALID FOR A PERIOD EQUAL TO THE PERIOD OF VALIDITY OF THE IMPROVEMENT PERMIT. NOT TO EXCEED 5 YEARS.

Owner: JACKSON BARBARA R

Address: 181 COW HORN RD RICHLANDS, NC 28574 **SR #:**

Subdivision: **Lot:** **Section:** **Phase:**

Block: **Part:** **System:** **Unit:** **Division:** **Tract:**

Location:

System Type/Description: III Infiltrator Quick 4 Plus Low Profile

System Classification: g. Other non-conventional trench system

Facility/Daily design flow: **3 bedrooms/360 GPD**

System Info: Install 7-56s LOW PROFILE CHAMBER LINES in 83'x83' in 24" fill. Fill mound must be installed and approved prior to beginning installation of the drain lines. Contact the Onslow County Health Department for an inspection.

LTAR: .3 gpd/sq. ft.

Water Supply: Public

Septic Tank Size: 900 NEW gallons

Grease Trap Size gallons

Pump Tank Size: gallons

Nitrification Area: 1200' sq. ft.

Nitrification Area: 400' lin. ft.

No of Lines: 7 **Line Length:** 56' **Line Width:** 3'

Trench Bottom Depth: 10" above original soil / fill interface

(SEE ATTACHED PAGES 1 - 1 of 3 FOR ADDITIONAL PERMIT CONDITIONS)

Signed By: Sam Frazelle / Sam Frazelle Date: 06/07/2013

This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. This Construction Authorization shall not be transferred when there is a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit. The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958 and .1959 are incorporated by reference into this permit and shall be met.

THE ISSUANCE OF THIS C.A. DOES NOT CONSTITUTE AN ONSLOW COUNTY WARRANTY OR GUARANTEE OF THE FUNCTIONALITY OF THE WASTEWATER SYSTEM

Owner: BARBARA JACKSON
Address: 181 COW HORN RD.
Location:

"AS BUILT" PLOT PLAN

1 inch = 40 feet

Addendum to permit # EOP2013-01726
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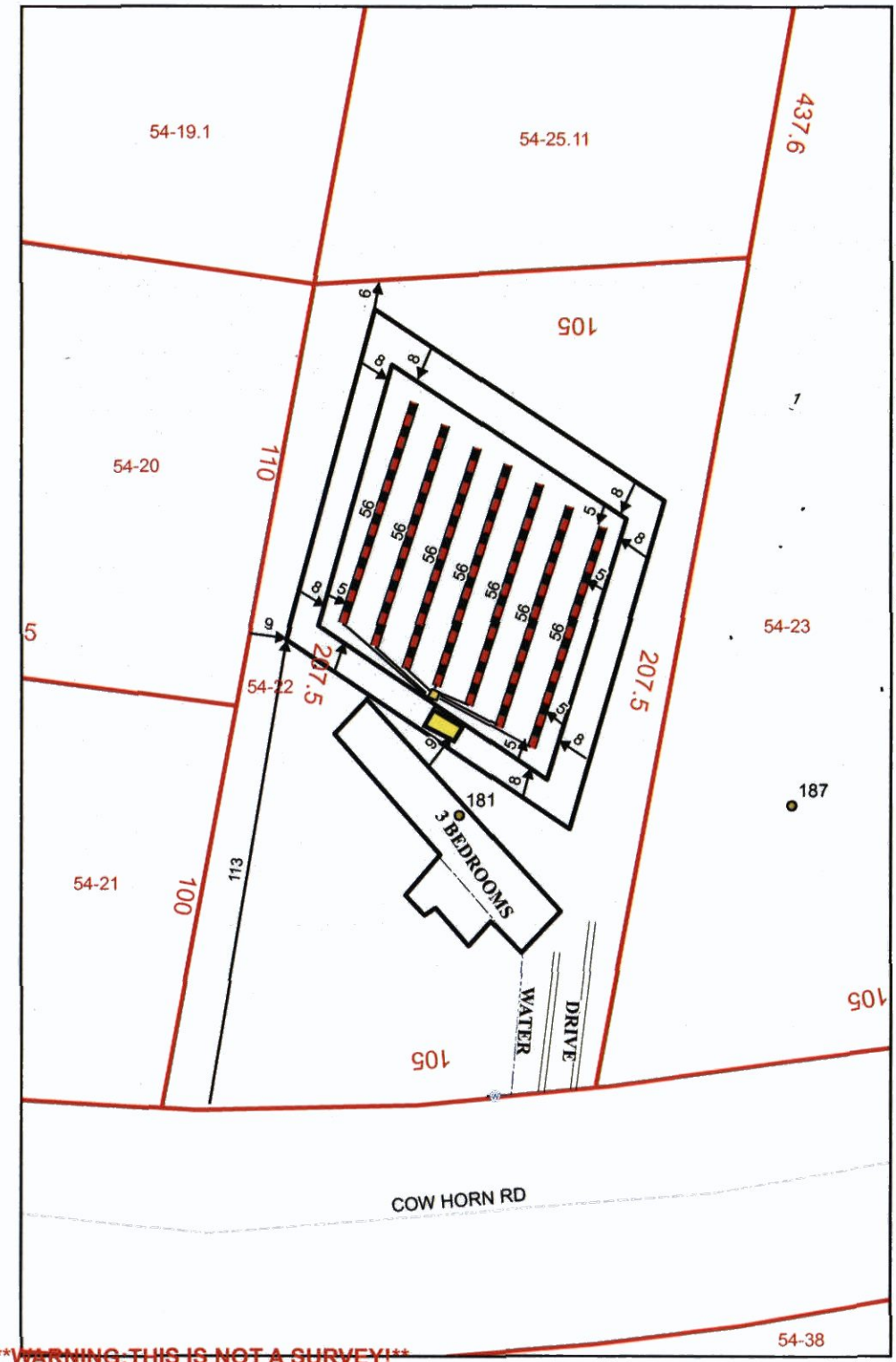

Additional Permit Conditions:

1. Do not park or drive on any part of system or repair area.
2. Nitrification trench aggregate shall be covered with straw, untreated paper or other approved materials prior to final cover/backfilling.
3. Do not install system under wet conditions.
4. Adhere to minimum set back requirements as stated in Rule .1950 and .1951 of NC Laws and Rules for Sewage Treatment and Disposal System (Article 11, G.S. Chapter 130A) unless otherwise indicated on this permit.
5. Rock used in soil absorption systems shall be clean, washed gravel or crushed stone and graded or sized in accordance with size numbers 3, 4, 5, 57, or 6 of ASTM D-448 (standard sizes of coarse aggregate) whichis hereby adopted by reference in accordance with G.S. 150 B-14 (c). Documentation of aggregate size shall be available upon request.
6. All pump tanks shall be tested for water tightness. Septic tanks may be subject to a water tightness test.
7. The septic tank is designed to receive sewage or wastewater under gravity flow. However, if a system subject to the N.C. Plumbing Code is used to pump raw sewage to the septic tank, the sewage shall be reduced to gravity/non-turbulent flow by approved means at the inlet of the septic tank.
8. An accepted wastewater system may also be installed in accordance with the accepted wastewater system approval. (Maximum LTAR of 1.0 gpd/ft2)
9. Run lines parallel to contour. System components represent approximate contours only. The contractor must flag the system prior to beginning the installation to insure that proper grade is maintained.
10. A recorded plat or deed and corresponding map shall be submitted to the Environmental Health Section of the Onslow County Health Department PRIOR TO the issuance of the Construction Authorization.
11. An APPROVED stormwater plan shall be submitted to the Environmental Health Section of the Onslow County Health Department PRIOR to issuance of a Construction Authorization.
12. FOR DWELLING UNIT WASTEWATER SYSTEMS ONLY – This wastewater system is designed only for the number of bedrooms shown as bedrooms or sleeping rooms on the building/floor plan approved by Onslow County Code Enforcement. No other room or space may be relabeled as a bedroom, used as a bedroom, or converted into a bedroom without prior approval from Onslow County Environmental Health.

SYSTEM DESIGN

# BEDROOMS/ GPD:	3 BEDROOMS/360 GPD	
SYSTEM TYPE:	IIIq LOW PROFILE	
% REDUCTION:	NA	
LTAR:	.3	
SQ. FT.	1200'	
LINEAR FEET	400'	
# OF LINES:	7	
LENGTH EACH LINE:	56'	
TRENCH BOTTOM:	10"above original	
TRENCH WIDTH:	3'	FEET
FEET ON CENTER(LINES)	9'	FEET
REPAIR AREA:		

Owner: BARBARA R JACKSON
Address: 181 COW HORN ROAD
Location: RICHLANDS, NC 28574

REPAIR
6/14/2013
PLOT PLAN
1 inch = 30 feet

Addendum to permit # ECA2013-0048
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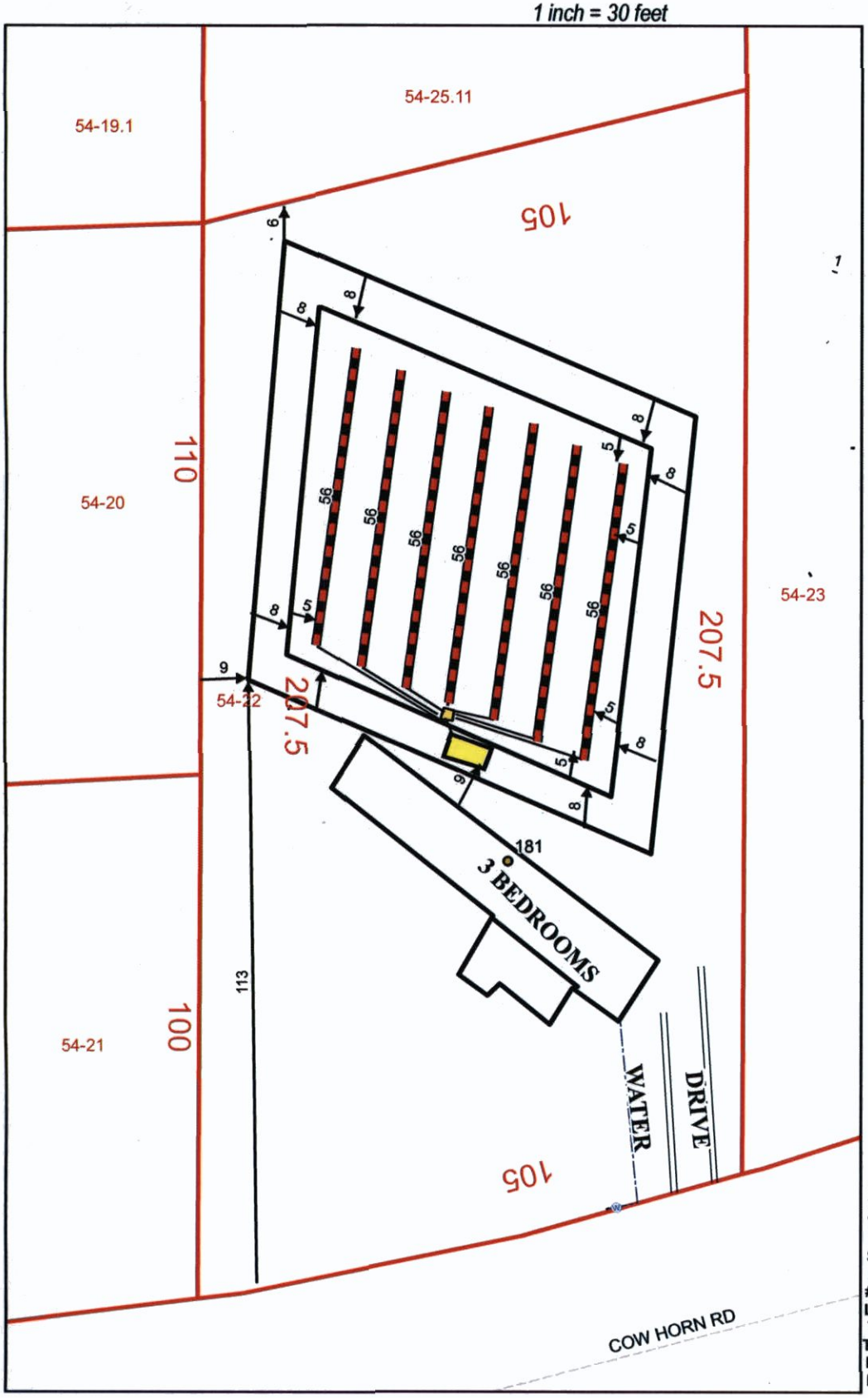


Additional Permit Conditions:

1. Do not park or drive on any part of system or repair area.
2. Nitrification trench aggregate shall be covered with straw, untreated paper or other approved materials prior to final cover/backfilling.
3. Do not install system under wet conditions.
4. Adhere to minimum set back requirements as stated in Rule .1950 and .1951 of NC Laws and Rules for Sewage Treatment and Disposal System (Article 11, G.S. Chapter 130A) unless otherwise indicated on this permit.
5. Rock used in soil absorption systems shall be clean, washed gravel or crushed stone and graded or sized in accordance with size numbers 3, 4, 5, 57, or 6 of ASTM D-448 (standard sizes of coarse aggregate) whichis hereby adopted by reference in accordance with G.S. 150 B-14 (c). Documentation of aggregate size shall be available upon request.
6. All pump tanks shall be tested for water tightness. Septic tanks may be subject to a water tightness test.
7. The septic tank is designed to receive sewage or wastewater under gravity flow. However, if a system subject to the N.C. Plumbing Code is used to pump raw sewage to the septic tank, the sewage shall be reduced to gravity/non-turbulent flow by approved means at the inlet of the septic tank.
8. An accepted wastewater system may also be installed in accordance with the accepted wastewater system approval. (Maximum LTAR of 1.0 gpd/ft2)
9. Run lines parallel to contour. System components represent approximate contours only. The contractor must flag the system prior to beginning the installation to insure that proper grade is maintained.
10. A recorded plat or deed and corresponding map shall be submitted to the Environmental Health Section of the Onslow County Health Department PRIOR TO the issuance of the Construction Authorization.
11. An APPROVED stormwater plan shall be submitted to the Environmental Health Section of the Onslow County Health Department PRIOR to issuance of a Construction Authorization.
12. FOR DWELLING UNIT WASTEWATER SYSTEMS ONLY – This wastewater system is designed only for the number of bedrooms shown as bedrooms or sleeping rooms on the building/floor plan approved by Onslow County Code Enforcement. No other room or space may be relabeled as a bedroom, used as a bedroom, or converted into a bedroom without prior approval from Onslow County Environmental Health.

SYSTEM DESIGN

# BEDROOMS/ GPD:	3 BEDROOMS/360 GPD
SYSTEM TYPE:	IIIg INNOVATIVE LOW PROFILE
% REDUCTION:	0%
LTAR:	.3
SQ. FT.	1200
LINEAR FEET	400
# OF LINES:	7
LENGTH EACH LINE:	56'
TRENCH BOTTOM:	10" ABOVE ORIG. SOIL/FILL INTERFAC
TRENCH WIDTH:	3 FEET
FEET ON CENTER(LINES)	9 FEET
REPAIR AREA:	

Addendum to Permit # ECA 2013-00448
Page 2 of 3

Owner: Barbara Jackson
Address: 181 Cow Horn Rd
Location: _____

FILL SYSTEM DETAIL SHEET

I. Specifications

A. Site
1) Wastewater flow 360 gpd
2) Soil texture group III
3) LTAR .3 gpd/sq. ft.

B. Trenches
1) Trench Bottom 1200 sq. ft.
2) Trench Width 3 ft.
3) Trench Length 400 ft.
4) Number of Trenches 7
5) Length of Each Trench 57 ft.

C. Fill
1) Length of Fill 83 ft.
2) Width of Fill 83 ft.
* 3) Total Fill Area 6889 sq. ft.
4) Depth of Sand 18 in.
5) Depth of Cover 6 in.

*[The outside edge of any trench shall be at least 5 feet from the top of the side slope of the fill.]

II. Site Preparation

A. Place flags at the 4 corners of the fill area as designated on page 1 of 3 of the Improvement Permit. Failure to place fill in the permitted area may result in the fill having to be moved or the permit revoked.

B. Do not work when the site is wet. Working on soil when wet can destroy soil structure.

C. Remove all above ground vegetation and root mat from area to be filled without removing topsoil. Removal of soil can result in revocation of the permit.

D. Disk the area to be filled to a depth of 6 inches to break up root mat.

III. Placement of Fill

A. Add 3 to 4 inches of approved sand fill to area and disk again to thoroughly mix the original soil and the fill. Approved sand fill is a sand or loamy sand.

B. Add more sand fill to achieve a uniform height of 18 " (see ID on diagram) in the middle of the fill area.

C. The fill shall be tapered from the top edge of the fill to the ground surface 2 feet from the boundary of the fill area. The top edge of fill is located 5 feet from the proposed trenches.

D. ~~XX~~ X 6/11/13 Contact Health Department for inspection of fill after owner or owner's legal representative has submitted an application for a Construction Authorization. Contact Health Department for inspection of fill prior to installing nitrification trenches if Construction Authorization has already been issued.

IV. Final Landscaping of Fill System:

A. The fill must be shaped to shed surface water and shall be stabilized with grass or other suitable cover to prevent erosion.

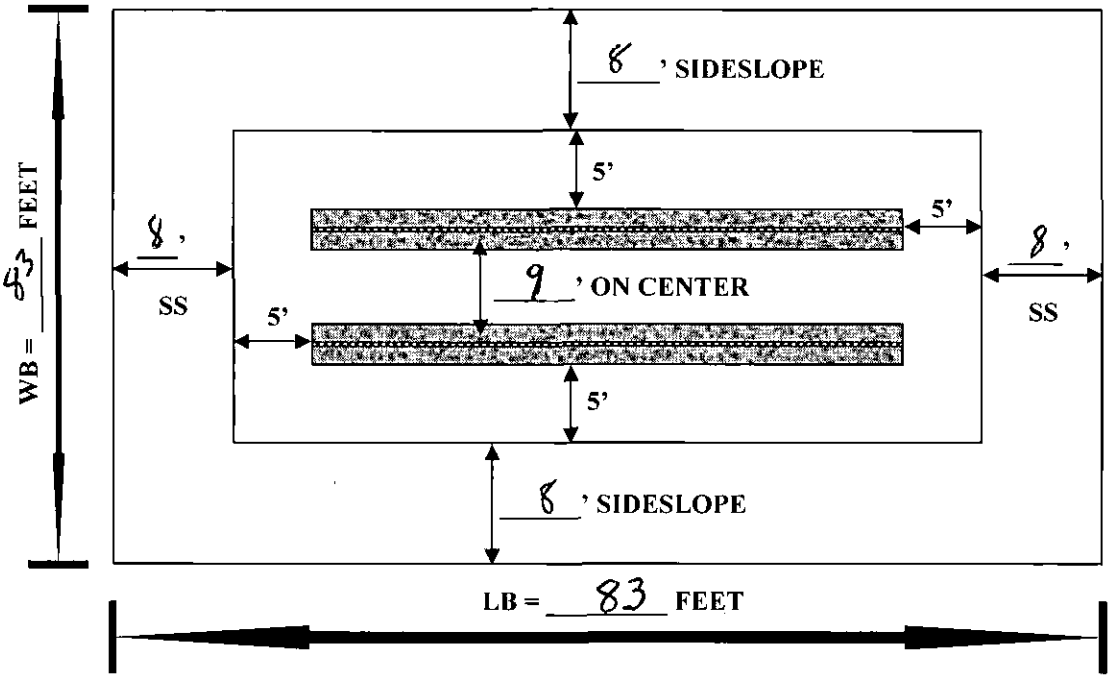
B. Vegetation must be maintained once established. Grass must be mowed.

C. Additional fill beyond what has already been specified may be necessary to cover and landscape around the septic tank.

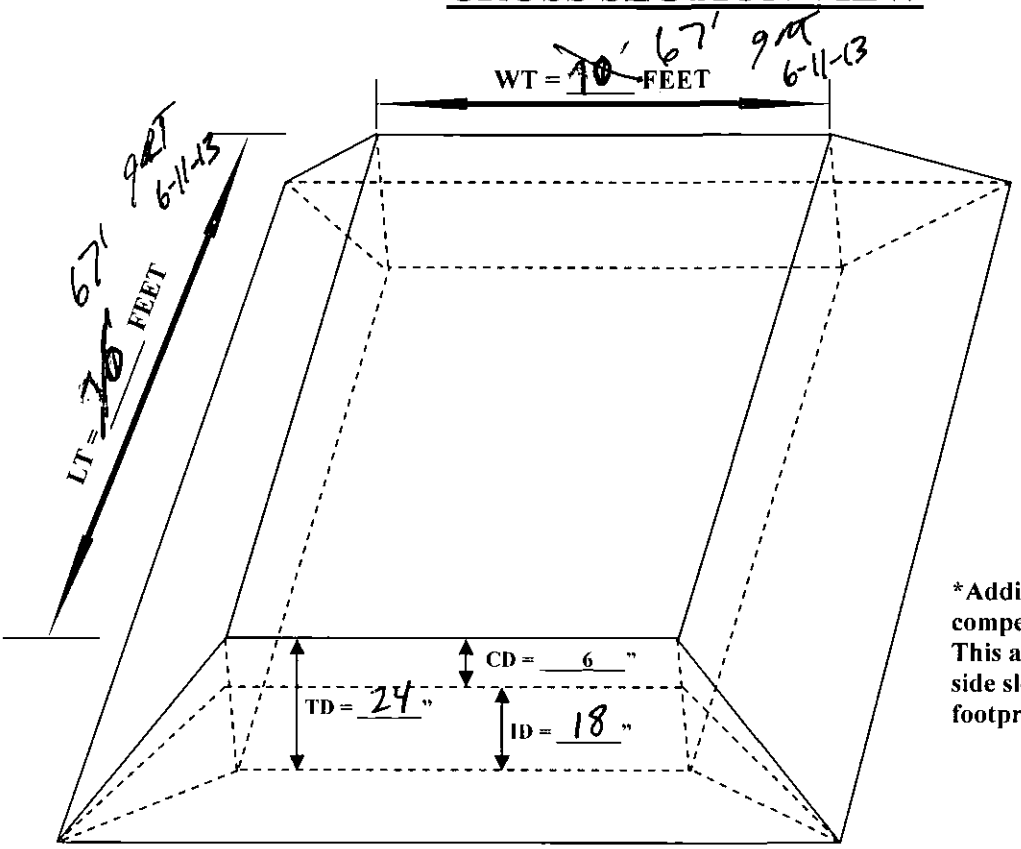
D. Call the Health Department for inspection after landscaping has been completed. The Operation Permit allowing use of the system will be issued at that time.

FILL SYSTEM DETAIL

PLAN VIEW



CROSS SECTION VIEW



WB = WIDTH OF BOTTOM
LB = LENGTH OF BOTTOM
SS = SIDESLOPE
WT = WIDTH OF TOP
LT = LENGTH OF TOP
ID = INITIAL DEPTH
CD = COVER DEPTH
TD = TOTAL DEPTH

*Additional fill may be needed to compensate for changes in elevation. This additional fill will require larger side slopes and, therefore, a larger footprint.

SEPTIC TANK INSPECTION CHECKLIST (Type II-IV)

Name: Barbara Jackson Location: _____

Address: _____

_____

_____

Date of Construction Authorization _____ (If after January 1, 1999, Septic Tank with filter required)

SEPTIC TANK	INITIAL DATE	NITRIFICATION LINES	INITIAL DATE
Manufacture Date	E	Trench Type: Low Profile	
State ID Number 4-5-12	X	Trench Width: 3'	
Capacity	1000	Trench Length: 56'	
Tee/Approved Filter 4-30-13	OK	Trench Bottom Depth ok	
Baffle	OK	Trench Grade ok	
Sealant		Rock Depth & Quality (3, 4, 5, 57, 6)	
Tank Penetration Seal		Aggregate Cover 4-30-13	
Riser if Applicable		Warranty (if applicable)	
PUMP TANK		Dams/Stepdowns/Drop box, etc.	
Manufacture Date		Pressure Lateral:	
State ID Number		Hole Spacing:	
Capacity		Hole Size:	
Waterproof/Sealant		Turn-ups/Protectors	
Riser		**DISTRIBUTION SYSTEM**	
Water tightness Test (Note Reading Below)		Distribution Method: D-Box	
PUMP		Serial Dist.	
Check Valve/Gate valve		Pressure Manifold 4-30-13	
Anti-siphon Hole (Size)		Pipe (Material and Grade)	
Float Switches		Valves	
Electrical Components		**SUPPLY LINE**	
Rate (gpm)		Location	
Pump Manufacturer:		Pipe (Material)	
Pump Model Number:		Pipe Size	
Pump Removal Method		Hydrostatic Leak Test:	
GREASE TRAP		**LANDSCAPING**	
Manufacture Date		Surface Drain	
State ID Number		Subsurface Drain	
Capacity		Depth of Cover: Tank: 0 Drainfield: ≥6"	9-6-13 ok
Tee/Approved Filter		Finish Grade/Stabilize (if applicable) straw	9-6-13 ok
		Permanent Markers	
		OTHER	
		System Setbacks ok	
		Legal Documents	
		Mound Approved (Texture, Interface,	
Contractor:		Location, Length, Depth, Width)	

Revised 6-20-07

COMMENTS: